

CLAIMS

1. Multicoupling device for lines, especially hydraulic lines, with coupling units (1-4), which are provided in a number corresponding to a number of
5 connections to be produced and which each have a plug and a socket that receives the plug, and with first and second coupling parts (7, 8), wherein the plug is fixed to one of the coupling parts and the socket of a corresponding coupling unit is fixed on the other of the coupling parts, wherein the coupling units are embodied as self-locking snap couplings, whose sockets
10 each have a locking collar (9), which can be displaced in relation to the socket, wherein the two coupling parts can be brought together and pressed apart by means of operating elements and can be fixed relative to each other in the coupling position, wherein the locking collars (9) of the corresponding coupling unit (1-4) interact with a switch plate (11), which is common for all
15 coupling units (1-4) and which lies between the two coupling parts (7, 8), wherein the switch plate (11) can be adjusted relative to a coupling part (8) in a closing and opening direction of the coupling units (1-4), and wherein the two coupling parts (7, 8) can be moved relative to each other by at least one operating element (10) mounted on the switch plate (11) with engagement
20 via at least one curved engagement slot (13) and a pin (14) formed on the other coupling part (7) into closed and open positions and can be mutually locked in the closed position, characterized in that the operating element (10) is held on the switch plate (11) so that it can rotate about an axis (12) that extends parallel to a plane of the switch plate (11); the axis
25 (12) for receiving the operating element (10) is formed by a shaft mounted in the switch plate (11) or by two shaft stumps; the shaft (18) engages in an elongated hole (19) in a wall part (20) of one coupling part (8) in a region

between the switch plate (11) and the operating elements (10); and the switch plate (11) can move independent of the locking collars (9).

2. Multicoupling device according to Claim 1, characterized in that the two
5 coupling parts (7, 8) can be automatically locked in the closed position by additional locking elements (15).

3. Multicoupling device according to Claim 1, characterized in that the
coupling parts (7, 8) and the switch plate (11) are guided so that they can
10 move along a common guide tube (16) passing through these parts in a center region.

4. Multicoupling device according to one of the preceding claims, characterized in that an activation lever (21) is attached to one or to both ends of the
15 shaft (18) or to two shaft stumps.

5. Multicoupling device according to one of the preceding claims, characterized in that operating elements (10) are placed on two ends of the shaft (18) or on two shaft stumps.

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6. Multicoupling device according to Claim 5, characterized in that the operating elements (10) placed on the two ends of the shaft (18) or in the region of the two shaft stumps each have an activation lever (21), whose free ends are connected to each other via a handle.

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7. Multicoupling device according to one of Claims 1 to 3, characterized in that the operating elements (10) include engagement slots (13) and are

arranged on two ends of the continuous shaft (18), wherein an activation lever (21) is formed on only one operating element (10) arranged on one side.

- 5 8. Multicoupling device according to one of the preceding claims, characterized in that the switch plate (11) is spring-loaded in a direction towards the open position of the coupling units (1-4) and/or the locking collars (9) are spring-loaded in a direction of their locked position.
- 10 9. Multicoupling device according to one of the preceding claims, characterized in that the operating element (10) is formed by at least one switch connecting link arranged between the coupling units (1-4).
- 15 10. Multicoupling device according to Claim 9, characterized in that the switch connecting link provided in an inner region between the coupling parts (7, 8) is formed by the operating element held on the shaft (18) and a pin held on the other coupling part (7).
- 20 11. Multicoupling device according to Claims 1, 2, 9, and 10, characterized in that the operating element (10) lies in a slot of the guide tube (16) and is rotationally fixed to the shaft (18) and the pin (14) interacting with the operating element (10) is inserted into a slot of the guide pin (17).
- 25 12. Multicoupling device according to one of the preceding claims, characterized in that bearing sleeves (22) for the shaft (18) or the shaft stumps are provided on two opposing edges of the switch plate (11), wherein the bearing sleeves (22) project past the edges of the switch plate (11) and

engage in elongated holes (19) in the wall parts (20) of one coupling part (8) and thus are guided so that they can move in the holes perpendicular to the axis (12).

- 5 13. Multicoupling device according to Claim 2, characterized in that the additional locking elements (15) are embodied as spring-loaded latching, automatically locking clips, pins, bars, or the like.

- 10 14. Multicoupling device according to Claim 13, characterized in that the clips, pins, bars, or the like can be brought into a released position by hand.

- 15 15. Multicoupling device according to Claim 14, characterized in that the locking element (15) is provided in the form of a spring-loaded pin and is allocated to the activation lever (21) and latches behind a catch ramp for a closed coupling device, and the spring-loaded pin can be disengaged by a push-button formed on a free end of the activation lever (21).

- 20 16. Multicoupling device according to one of the preceding claims, characterized in that handles (24) for lifting and for transport are arranged on at least one of the coupling parts (7, 8) on two opposite boundaries.